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ABSTRACT

The insecurities generated in children by stressful environmental changes can compromise their receptivity to learning and their attitude toward school. Studies examining divorce outcomes focus primarily on two cognitive indicators: achievement and intelligence. This study explored the relationship between creative thinking components and family change caused by parental separation. Interest in the relationship between creativity and family change originally derived from studies that reported early parental loss among eminent people. The paper hypothesized that personal efforts to cope with fluctuating levels of separation-related stress evoke thought processes that exercise creative thinking abilities. The subjects of the study were 116 third, fourth, and fifth graders from seven rural public school districts in Central New York State. Half were from single parent families and half were from intact families. Tests used were the Group Inventory for Finding Creative Talent, the Revised Art Scale, and the Family Environment Scale. The findings did not support the hypothesis; however, children of single parents scored significantly higher on the variables origence, achievement orientation, and intellectual-cultural orientations. The paper suggests possible reasons for the differences. Twenty-four references are included. (Author/KS)

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Creativity: Its Relationship to Single Parent Family Structure

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Paper presented at the Tenth Annual Conference of the Eastern Educational Research Association, Boston, Massachusetts, February, 1987.

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Abstract

The insecurities generated in children by stressful environmental changes can compromise their receptivity to learning and their attitude toward school. Recognizing these potential reverberating effects in the school setting, several investigators have endeavored to identify divorce effects on childrens' academic, emotional, and behavioral functioning. Results have been mixed, mainly attributed to the influence of other individual and situational factors, and methodological differences. However, several studies report deleterious effects for a period of time after separation.

Studies examining divorce outcomes have focused primarily on two cognitive indicators: achievement and intelligence. Few have explored the relationship between creative thinking components and family change caused by parental separation. Creative abilities are often nurtured under conditions differing from those conducive for intellectual and academic development. It seems intuitively reasonable to suspect that not all cognitive abilities, particularly ordinary creative thought processes, are equally susceptible or influenced to the same extent or direction by stress conditions.

Interest in the relationship between parental separation and creativity originally derived from studies revealing a frequent occurrence of early parental loss among eminent people. Various explanations have been proposed for these findings. Typically they depart from the traditional "deficit" model and embrace a "difference" perspective to account for a different stress influence. Consonant with the latter perspective, the position guiding this inquiry proposes that the stressful experience of parental separation operates differently for creativity-related processes. The exercising effect on thought processes within the context of an more global adaptive explanation will be discussed.

Change is an inherent characteristic of the parental separation process and can represent an adaptive response to stress conditions at the individual and family levels. This study further explores family orientations for the purpose of identifying adaptive internal processes as a function of the parental separation experience.

Creativity: Its Relationship to Single Parent Family Structure

Jeanne E. Jenkins
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Parental separation is becoming an increasingly common experience in the lives of many school-age children. By 1990, it is estimated that approximately one third of the children in this country will experience parental divorce/separation before they are 18 years of age (Glick, 1979). Evidence for the importance of a rural focus is witnessed by the rising divorce rate and number of children involved among rural populations (Coward & Jackson, 1983). Contributing to this trend are single parent families who relocate to rural areas for some relief from economic strain. The stress level may also be higher and the effects of parental separation more pronounced due to fewer support services and relative isolation in rural areas (Hedlund, Berkowitz, & Bennett, 1979; Hedlund & Berkowitz, 1978).

Divorce and parental separation are critical experiences that affect the emotional, behavioral, and cognitive functioning of children. While reactions to stressful processes are contingent upon personal interpretations, previous experiences, and developmental status, the experience of parental separation in general represents a stressful change for children (Coddington, 1972; Gersten, Langner, Eisenberg, & Orzek, 1974). Several studies report adverse consequences for children of divorce (Guidubaldi, Cleminshaw, Perry, & McLaughlin, 1983; Hetherington, Cox, & Cox, 1978; Stolberg & Anker, 1983). There is sufficient evidence that stress precipitated by divorce/

parental separation intersects the learning process to temporarily disrupt performances requiring sustained concentration.

There is little information concerning parental separation effects on other cognitive abilities which are nurtured under conditions differing from those conducive for academic performance. This paper discusses the preliminary findings from an investigation exploring whether parental separation yields differential cognitive effects by focusing on a cognitive area which has received little attention in the children of divorce literature. Selected family orientations expected to be influenced by the parental separation process are also discussed.

Approaching this phenomena from a difference rather than a deficit perspective is intended to complement previous research efforts. The parental separation experience and single parent families may better illuminate how different cognitive abilities respond under conditions of stress, change, and unpredictability. Differences in family orientations are expected to provide insights into the functional properties of single parent families.

Review of Research

Previous studies which have addressed the relationship between parental separation and cognitive creative abilities provide a platform for further inquiry. Consideration of the parallels between conditions and characteristics associated with creative thinking and those associated with parental separation/ single parent families also provide a basis for the present

study.

Early studies which focused on the family background characteristics of historically recognized figures revealed a frequent occurrence of early parental loss (Albert, 1971; Woodward, 1974; Martindale, 1972; Becker, 1974). More recently, Cornelius and Yawkey (1986) found that high levels of imaginativeness in preschoolers correlated significantly with single parent family status. Wallerstein and Kelly (1980) reported that one year after divorce, children were observed to have a certain flexibility that distinguished them from their peers. They developed more tolerance for change and an enhanced capacity to delay gratification - characteristics associated with creative thinking development.

Family-related factors have also been related to characteristics associated with creative thinking for single parent family children. The Heilbrun study (1974) revealed that father absent males who were exposed to a high controlling, low nurturing maternal influence showed a creativity deficit. Guidubaldi, Cleminshaw, Perry, and Kehle (1983) found that divorced children with authoritarian parents were rated lower by teachers on originality, independent learning, and higher on intellectual dependency.

Several explanations have been proposed for these and similar findings. Few, if any, have been empirically validated. It has been speculated that an emotional distancing between members in single parent families following separation accounts

for these effects. This "emotional distancing" phenomena often characterizes the family environments of creative individuals (Albert, 1971; MacKinnon, 1962; Miller & Gerard, 1979). Others (Becker, 1974) have suggested that the trauma of parental loss may be compensated for by less parental coercion and domination. This may have a liberating effect on creative thinking. The development of creativity as a function of learning to cope with stress may also attest to a tempering process.

Underlying the present study is the premise that personal efforts to cope with fluctuating levels of separation-related stress exercise thought processes conducive for the nurturance of creative thinking abilities. If children are cognitively engaged in entertaining alternative ideas to minimize their stress and confusion, an indication of this adaptive coping process should begin to appear in middle childhood. The present study examined the effect of parental separation on childrens' divergent thinking abilities and characteristics associated with creativity during the preadolescent period of maximum cognitive sensitivity to interpersonal stimuli.

Scholars interested in families under stress emphasize in their definitions of family crisis that the discontinuity embodied in stressful events produces change in the family system. Moen and Howery (1986) emphasize these changes in their discussion of three forms of adaptation open to families under stress: alterations in family activities, changes in family relationships, and changes in the level of tensions and strains

experienced by individual family members. Following these researchers lead, the present study further explores the first form of adaptation proposed by examining the effect of parental separation on selected family orientations and activities.

Methods

Subject Identification and Selection

Seven rural public school districts in selected Central New York State counties participated in the study. The eligibility for rural classification included an enrollment of less than 2000 students and a density requirement of fewer than 15 students per square mile.

Parental permission forms were sent home with all children in grades 3, 4, and 5. Forty percent of the 1484 families contacted responded favorably. The response rate varied by grade level, with the highest from third grade (47 percent) and the lowest from fifth grade (34 percent). From the group of consenting respondents, all single parent children residing in the custody of their mothers and an equal number of randomly selected intact family children were included. All two-parent family children were residing with both their natural parents. The two groups of children were matched on grade, sex, income, and first grade reading achievement. Information for the matching variables was obtained from school cumulative folders and a demographic sheet accompanying the parent permission form. Approximately equal numbers of boys and girls were included in

both groups. The single parent group had been separated from their fathers an average of 2-4 years. The final sample was comprised of 58 single parent children and an equal number of children from intact families.

Procedure

The participant children completed three measures assessing divergent thinking abilities and characteristics associated with creativity. Parents were requested to complete a questionnaire assessing social-environmental characteristics of families. Three follow-up procedures yielded a 92% return.

Fluency, flexibility, and originality of thought were measured through childrens' responses to an auditory, free-response exercise in divergent thinking. Test-retest reliabilities previously reported (Jaquish & Ripple, 1981) were as follows: fluency = 0.75; flexibility = 0.65; originality = 0.77.

The Group Inventory for Finding Creative Talent (GIFT) served as one measure for assessing characteristics associated with creativity. Reliability and validity data support the use of this instrument for the identification of children with characteristics of creativity (Rimm & Davis, 1980). Three scores were obtained for independence, imaginativeness, and interests. The Revised Art Scale (Welsh, 1980) was administered to all subjects and scored for origence. This has been conceptually defined as a personality dimension extending from preference for the unstructured and implicit to the structured and explicit.

Response to this instrument conforms to a basic preference dichotomy.

The following selected subscales from the Family Environment Scale (Moos, 1974) were used to measure social-environmental characteristics of families: (a) independence; (b) achievement orientation; (c) intellectual-cultural orientation; and (d) active recreational orientation. Internal consistencies and test-retest reliabilities have been reported to range from .61 to .86 (Mitchell, 1985).

Data gathering sessions were conducted in public schools with groups ranging in size from 4 to 6 children. Children were assured that their scores would not be used for evaluative purposes. They were instructed not to reveal their identity on any of the tests. This procedure was used to convey the idea of confidentiality and to minimize a competitive atmosphere. Answer sheets were coded to match the scale completed by the parents.

Results

Before proceeding to the preliminary analyses of the data, a description of the composition of the sample will provide a context within which results may be interpreted.

The mothers' educational level for both single and intact groups ranged from high school completion to some post-secondary participation. Seventy-six percent of the single parent mothers were employed more than 20 hours per week versus 41 percent of the mothers from dual parent families. The mean annual income for both family types ranged from approximately $10,000 to

$20,000.

The single parent families clustered into the following four post-separation stages: (a) 33.9 percent separated from less than 1 year to 2 years; (b) 45.7 percent separated from 2 to 4 years; (c) 17.0 percent separated from 4 to 6 years; and (d) 3.4 percent separated from 6 to 7 years.

To determine the effect of parental separation on the dependent variables, groups were matched and compared using a series of paired-sample t-tests and signed ranks tests. In these analyses, 4 of the 11 statistical tests yielded significant group differences. The means, standard deviations, and significant tests for the combined sample appear in Table 1.

Significant differences observed occurred within the creativity and family characteristics categories. There were no significant differences between groups on any of the divergent thinking components. For the four variables which reached statistical significance, the means in all cases were greater for the single parent children. Significant differences were obtained for origence, achievement orientation, independence orientation, and intellectual-cultural orientation.

Discussion

These findings do not lend support for the hypothesis that parental separation has a significant effect on rural childrens' divergent thought processes. It is possible that these abilities may not be sufficiently developed as a function of stress

adaptation to permit a generalized divergent response to stimuli other than content specifically concerning family/ interpersonal type problem situations. However, these results would imply that not all cognitive abilities are equally susceptible or influenced to the same degree or direction by this stress-related process.

The significant differences between single and two parent family children on origence do clearly implicate parental separation effects on childrens' dispositional preferences related to creative thinking. Significantly higher scores on origence suggest that single parent children prefer implicit, open environments which they can structure in their own way. It also implies a resistance to conventional approaches pre-determined by others and preference for doing things on their own.

Stronger achievement orientations in single parent families may be indicative of efforts to encourage a receptivity to learning and inquiry as well as conformity to academic standards. Alternatively, it might be argued that a stronger achievement orientation reflects the expression of the single parent mother's own achievement needs as well as heightened concern for her childrens' self-sufficiency in later life. These findings may also partially account for the recovery trend. Multiple comparison procedures revealed stronger achievement orientations in these families during the 2-4 year separation duration period when adverse achievement effects begin to abate. Recognition of

the achievement decline following separation may act as a catalyst for more emphasis on school work. Adverse achievement effects may diminish as a function of more emphasis on achievement in the home across time.

Significant differences between the two groups on the intellectual-cultural orientation scale were not in the expected direction. Consistent with the underlying conceptualization of this family process, this counterintuitive finding would suggest a stronger orientation in rural single parent families toward political, social, and intellectual concerns. On the basis of this finding, it would appear that rural single parent mothers are not inattentive or insensitive to their childrens' needs for intellectual stimulation. It may well be that single parents devote more time to cultivating their childrens' intellectual curiosity and social consciousness by encouraging library visitations, discussing social problems, and emphasizing the importance of learning about new and different things. Due to the consenting nature of this sample and the social desirability factor which may have operated more strongly for this family orientation, this finding should be cautiously interpreted.

Increased maternal responsibilities and less available time would be expected to place more maturity demands on children and more responsibility for managing their own time. A stronger independent orientation indicates that there is more emphasis in single parent homes to be less dependent and more self-directed.

Future analyses will explore the relationship between these

family variables and childrens' divergent thinking abilities and characteristics associated with creative thinking.

References

Albert, R.S. (1971). Cognitive development and parental loss among the gifted, the exceptionally gifted and the creative. Psychological Reports, 29, 19-26.

Becker, S. (1974). Father absence and its relationship to creativity. Graduate Research in Education and Related Disciplines, 7(2), 32-51.

Cornelius, G.M., & Yawkey, T.D. (1986). Imaginativeness in preschoolers and single parent families. The Journal of Creative Behavior, 19(1), 56-66.

Coward, R.T., & Jackson, R.W. (1983). Environmental stess: The rural family. In H. McCubbin & C. Figley (Eds.), Stressful life events: Their nature and effects. New York: John Wiley & Sons.

Gersten, J.C., Langner, T.S., Eisenberg, J.G., & Orzek, L. (1974). Child behavior and life events: Undesirable change or change per se? In B.S. Dohrenwend & B.P. Dohrenwend (Eds.), Stressful life events: Their nature and effects. New York: John Wiley & Sons.

Glick, P. (1979). Children of divorced parents in demographic perspective. Journal of Social Issues, 35, 170-182.

Guidubaldi, J., Cleminshaw, H., Perry, J., & Kehle, T. (1983, March). The impact of parental divorce on children: A report of the nationwide NASP study. Paper presented at the annual convention of the National Association of School Psychologists, Detroit, MI.

Guidubaldi, J., Cleminshaw, H., Perry, J., & McLaughlin, C. (1983). The impact of parental divorce on children: Report of a nationwide NASP study. School Psychology Review, 12(3), 300-323.

Hedlund, D.E., & Berkowitz, A.S. (1978). Farm family research in perspective 1965-1977. (Rural Sociology Bulletin No. 79, A.E. Res. 78-18). Ithaca, NY: Cornell University, Department of Agricultural Economics.

Hedlund, D.E., Berkowitz, A.D., & Bennett, D.E. (1979). Stress in the farm family. Journal of Extension, 41-45.

Heilbrum, A.R. (1971). Maternal child rearing and creativity in sons. Journal of Genetic Psychology, 119, 175-179.

Hetherington, E.M., Cox, M., & Cox, R. (1978). Family interaction and the social, emotional, and cognitive development of children following divorce. In V. Vaughn & T.B. Brazelton (Eds.), The family: Can it be saved. New York: Medical Science.

Jaquish, G.A., & Ripple, R.E. (1981). Cognitive creative abilities and self-esteem across the adult life-span. Human Development, 24, 110-119.

MacKinnon, D.W. (1962). The nature and nurture of creative talent. American Psychologist, 17(7), 484-494.

Martindale, C. (1972). Father's absence, psychopathology, and poetic eminence. Psychological Reports, 31, 843-847.

Miller, B.C., & Gerard, D. (1979). Family influences on the development of creativity in children: An integrative review. The Family Coordinator, 28, 295-312.

Mitchell, J.V. (Ed.). (1985). The ninth mental measurements yearbook (Vol. 2). Lincoln, Nebraska: The Boros Institute of Mental Measurements.

Moen, P., & Howery, C.B. (1986). The significance of time in the study of families under stress. In D.M. Klein & J. Aldoos (Eds.), Social stress and family development. New York: Guilford Press.

Moos, R.H., & Moos, B.S. (1981). Family environment scale manual. Palo Alto, California: Consulting Psychologists Press, Inc.

Rimm, S.B., & Davis, G.A. (1980). Five years of international research with GIFT: An instrument for the identification of creativity. The Journal of Creative Behavior, 14(1).

Stolberg, A.L., & Anker, J.M. (1983). Cognitive and behavioral changes in children resulting from parental divorce and consequent environmental changes. Journal of Divorce, 7(2), 23-40.

Wallerstein, J.S., & Kelly, J.B. (1980). Surviving the breakup: How children and parents cope with divorce. New York: Basic Books, Inc.

Welsh, G.S. (1980). Welsh figure preference test manual. Palo Alto, California: Consulting Psychologists Press, Inc.

Woodward, W.R. (1974). Scientific genius and loss of a parent. Science Studies, 4, 265.

Differences Between Single and Intact Family Children On Divergent Thinking, Creativity Characteristics and Family Variables (paired-sample t-test results)

TABLE 1

Variable	Mean		Standard Deviation		t	p-value	z^W
	Separated (n=58)	Intact (n=58)	Separated (n=58)	Intact (n=58)			
FLUENCY	18.97	18.38	7.99	7.17	0.48	0.632	-0.26
FLEX	13.24	13.17	3.94	3.81	0.12	0.908	-0.04
ORIG	4.11	3.92	2.62	2.45	0.41	0.687	-0.36
INTERESTS	7.72	8.00	2.29	2.17	0.65	0.518	-0.65
INDEP	6.67	6.45	2.34	2.40	0.50	0.617	-0.45
IMAG	6.24	5.84	1.48	1.77	1.19	0.238	-1.31
ORIGENCE	33.64	27.55	10.25	10.39	3.37**	0.001	-3.23
IND	49.51	45.02	13.61	10.28	1.77	0.082	-2.11*
AO	54.62	49.67	10.16	10.47	2.41*	0.019	-2.23*
ICO	52.29	46.48	14.14	13.02	2.37*	0.021	-2.25*
ARO	46.38	48.62	10.15	12.43	1.11	0.274	-1.39

*$p \leq .05$
**$p \leq .01$

Variable Key
FLEX: Flexibility
ORIG: Originality
INDEP: Independence
IMAG: Imagination
IND: Independence Orientation
AO: Achievement Orientation
ICO: Intellectual-Cultural Orientation
ARO: Active-Recreational Orientation

z^W Based on Wilcoxin Matched-Pairs Signed Ranks Test

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